

Chapter 2 SEARCH AND RESCUE OVERVIEW

A. NATIONAL SEARCH AND RESCUE (SAR) PLAN

1. The National SAR Plan, Appendix A, to reference (c), is a document that provides a system for the overall control and coordination of available facilities in all types of SAR operations. A single federal agency, through an appropriate Rescue Coordination Center (RCC), coordinates all operations in its area. SAR areas and assigned responsibilities are:
 - a. The Inland Area under the U. S. Air Force
 - b. The Maritime Area under the U. S. Coast Guard
 - c. The Overseas Areas under the various Unified Military Commanders
2. The federal agency for the area listed is responsible for organizing the existing agencies and their facilities, through a series of agreements, into a basic network for rendering assistance to both, military and non-military persons and property in distress. The agency also has the responsibility for carrying out the obligations of the United States within the respective SAR areas.

B. STATUTORY AUTHORITY TO CONDUCT SAR

1. The Coast Guard has been given the specific statutory authority for developing, maintaining, and operating rescue facilities and for rendering aid to distressed persons and property (i.e. personnel, ships and aircraft, both military and civil) on, over, and under the high seas and waters subject to the jurisdiction of the United States. The Coast Guard may render aid to persons and property at any time or location in which Coast Guard facilities and personnel are available and can be effectively utilized.
2. In carrying out its search and rescue function, the Coast Guard may utilize the facilities and personnel of the Coast Guard Auxiliary in performing SAR missions.

C. MARITIME AREAS

1. The Commandant, U. S. Coast Guard, has divided the Maritime area into the Atlantic Maritime area and the Pacific Maritime area.
2. Each maritime area is made up of multiple search and rescue regions (SRR). Each region of the maritime area is served by a RCC, normally located at the headquarters of the designated SAR coordinator.

D. RESPONSIBILITY OF SAR COORDINATORS

1. Primary responsibilities for SAR coordinators are defined as follows:
 - a. Prompt dissemination to interested commands of all information about distress incidents requiring SAR assistance.
 - b. Prompt dispatch of appropriate and adequate rescue facilities.
 - c. Thorough prosecution of SAR operations until rescue has been effected, assistance is no longer necessary, or operations are suspended when it is apparent that further effort would prove to be of no avail.

E. DUTIES OF SAR COORDINATORS

1. The following duties of SAR coordinators are of interest to Auxiliary aircrews who expect to be involved in SAR operations. They include:
 - a. Establish a rescue coordination center.
 - b. Ensure that a SAR plan is prepared and distributed to appropriate activities.
 - c. Establish, organize, and maintain communications facilities.
 - d. Designate SAR Mission Coordinators (SMC) for specific SAR missions.

F. SAR MISSION COORDINATOR (SMC)

1. The SMC is an official designated by the SAR coordinator to coordinate and control a specific SAR mission. Each SAR mission has an SMC who may be either the SAR coordinator or a designated official who is directed to coordinate and control a particular SAR mission.
2. Since the duties of the SMC require sophisticated and extensive communication capabilities, Auxiliary aircraft are usually not designated the SMC.

G. ON SCENE COMMANDER (OSC)

1. The On Scene Commander (OSC) controls SAR operations and communications at the scene of the SAR incident. In designating an OSC, it is important that adequate SAR facilities be continuously available so that the OSC may maintain direct control of on-scene operations and communications with assigned facilities. Frequent change of the OSC is not desirable. Seniority is not a basis for assuming OSC duties unless it becomes essential or is ordered by the SMC. If the OSC happens to be airborne, on-scene control shall be retained until relieved by the SMC or until relief becomes necessary and is accomplished by mutual agreement with another on scene unit. Such would be the case when the airborne unit reaches

its minimum safe fuel level. The SMC would be advised of that relief by means of a situation report (SITREP).

2. An OSC is not required for all missions, although the general rule is to designate an OSC anytime there are two or more SAR units in the area.
3. The SMC may designate an OSC when better coordination at the scene is required and such coordination can be more properly effected at the scene. If an OSC has not been designated, the first Search and Rescue Unit (SRU) arriving on scene assumes OSC responsibilities and advises the SMC.

H. RESPONSIBILITY OF SAR PARTICIPANTS

1. The assignment of degrees of SAR responsibility among various commands in no way affects the fundamental responsibility of any unit to initiate SAR operations as circumstances dictate. Independent action must, however, be reported immediately to the appropriate SAR coordinator through established communications channels.
2. Since Auxiliary air facilities and crews may be called upon to participate in a SAR operation at any time, all potential SAR participants should be familiar with standard procedures as set forth in this text.

I. AUXILIARY AIRCRAFT IN SAR

1. The relatively slow speed of the typical Auxiliary aircraft facility ideally suits it for searches for small vessels or debris. The fuel usage permits such aircraft facilities to search a given area with less fuel consumption than Coast Guard aircraft. The use of Auxiliary aircraft facilities for selected search missions also conserves Coast Guard units for more hazardous or specialized missions which are not suitable for Auxiliary aircraft such as medical evacuation from ships or air delivery of de-watering pumps.
2. Studies by the Coast Guard show that 86 percent of the cases to which the Coast Guard responded occurred within 3 miles of shore and that 95 percent of the cases occurred within 10 miles of shore. Thus, the single engine Auxiliary aircraft facility which is limited to 25 miles from shore (unescorted) for its operations is in a position to provide support for a major portion of the Coast Guard SAR missions requirement.
3. Scheduled weekend and holiday patrols during the boating season are one means by which Auxiliary aircrews can use their facilities to provide quick response to boating emergencies. In addition, many Auxiliary aircraft owners, observers, and air crew are available during the week in case of need for call out.

4. The typical Auxiliary aircraft facility is fixed wing and therefore is not capable of rescues at sea as are helicopters. The fixed wing Auxiliary aircraft facility is used primarily as a means of locating a distress, reporting it to the proper group, station, RCC, or SMC and then guiding surface craft or rotary wing aircraft to the scene. In effect we

SEARCH --- LOCATE --- VECTOR

5. One of the most effective areas of utilization of Auxiliary aircraft is in combination with surface vessels for team operations. As in any team operation, coordination is essential. Effective communications, good planning and acceptable practices are required. Each facility will perform those functions for which it is best suited. The aircraft will provide the extended search or observation coverage desired and the increased communication range. The surface vessel will accomplish the detailed search, positive identification, and will provide the actual direct assistance. This combination may be applied to routine safety patrols, search and rescue missions, or while patrolling special events such as marine parades or regattas.

J. LIMITATIONS

1. Although the aircraft facility is an extremely effective and versatile element of the Auxiliary, there are a number of limitations that must be understood and must be considered when assigning missions to aircraft. These limitations basically take two forms although both forms are closely related. These limitations may be of an administrative nature invoked to increase the safe use of the facilities, or a physical limitation inherent in the aircraft itself.
2. Administrative limitations are covered in reference (b), as well as in district directives designed to meet local conditions peculiar to the area. Such local restrictions must be determined before planning to utilize Auxiliary aircraft facilities on a mission. All FARs must also be adhered to. It is the pilots responsibility to advise the call out authority of these limitations, restrictions and regulations. The Pilot in Command (PIC) shall never accept any mission, for any reason, that endangers his crew, himself, his aircraft or anyone on the ground.
3. In addition to the administrative limitations placed upon the use of Auxiliary aircraft facilities and crew, the physical limitations of the types of aircraft normally available to the Auxiliary must also be considered. Most obvious of these is that little direct assistance can be rendered from the aircraft. Fixed wing aircraft facilities are limited to locating the distressed vessel or other target, establishing communications if possible, air dropping needed rescue equipment if approved, and directing surface vessels or Coast Guard rotary wing aircraft to the scene.
4. Limitations of a particular aircraft and its crew should also be evaluated prior to starting a mission. Missions with difficult conditions should be assigned to more

experienced aircrews. This is the responsibility of the call out authority who should be kept informed by the cognizant Auxiliary Air Operations Officer.

5. Flight time is often a limitation. Light aircraft do not have sufficient fuel capacity to stay on station as long as surface vessels. Most light aircraft carry fuel for at least three hours of flight with reserve. However some Auxiliary aircraft have flight time capability of over ten hours. In the case of safety patrols, a significant portion of the fuel may have been consumed before discovery or notification of a SAR case. When this situation exists, the aircraft may not be able to loiter awaiting the arrival of surface help.
6. Low wing aircraft have areas partially blocked from view close aboard on either side at the wing root and would usually have to maneuver to retain visual contact. Additionally, cramped quarters on some smaller aircraft may increase scanner fatigue.
7. It is highly recommended that only aircraft equipped with LORAN or GPS units should be used for complex SAR activities.

K. CALL OUT AUTHORITY

1. The call out authority will be the Coast Guard air station. In areas where Auxiliarists have no access to Coast Guard air stations a designated Coast Guard group may be the call out authority.
2. The DSO-AV or their designee should work closely with the call out authority to ensure the proper usage of facilities and crews. A procedure should be set up using the chain of command that will ensure prompt response, using appropriate aircraft, to a requested call out.